

## Textbook Alignment to the Utah Core – Eighth Grade Integrated Science

*This alignment has been completed using an “Independent Alignment Vendor” from the USOE approved list ([www.schools.utah.gov/curr/imc/indvendor.html](http://www.schools.utah.gov/curr/imc/indvendor.html).) Yes   x   No*

### Name of Company and Individual Conducting Alignment:

Jennifer Coker, Nanette Kalis, Deborah Fogel

A “Credential Sheet” has been completed on the above company/evaluator and is (Please check one of the following):

☒ On record with the USOE.

☐ The “Credential Sheet” is attached to this alignment.

Instructional Materials Evaluation Criteria (name and grade of the core document used to align): Eighth Grade Integrated Science Core Curriculum

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Title: Ecology (E), Earth Materials and Processes (F), The Changing Surface of Earth (G), The Water Planet (H) The Air Around You (I), Astronomy (J), The Nature of Matter (K), Chemistry (L), Motion, Forces, and Energy (M) Electricity and Magnetism (N), Waves, Sound and Light (O) © 2008

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Publisher: Glencoe/McGraw-Hill

<b>Overall percentage of coverage in the <i>Student Edition (SE)</i> and <i>Teacher Edition (TE)</i> of the Utah State Core Curriculum: _____%</b> <b>Overall percentage of coverage in <i>ancillary materials</i> of the Utah Core Curriculum: _____%</b>			
<b>STANDARD I: Students will understand the nature of changes in matter.</b>			
<b>Percentage of coverage in the <i>student and teacher edition</i> for Standard I: _____ %</b>		<b>Percentage of coverage not in student or teacher edition, but covered in the <i>ancillary material</i> for Standard I: _____%</b>	
<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition (SE)</i> and <i>Teacher Edition (TE)</i> (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>
<b>Objective 1.1:</b> Describe the chemical and physical properties of various substances.			<i>Not covered in TE, SE or ancillaries</i> ✓
<b>a.</b>	Differentiate between chemical and physical properties.	<b>Student Edition:</b> (E) 44-45, 103 <i>MiniLab</i> 103 (F) 42 (K) 72-76 <i>Chapter 3 Study Guide</i> 91 <i>Lab</i> 77 <i>Section 1 Review</i> 76 #4 <b>Teacher Wraparound Edition:</b> (E) AS 103; LD 104; QD 45; SJ 45 (K) As 76; BI 70; D 73; DI 73; R 76, 87; SCB 70E; SJ 75; TPK 78; VL 73	

OBJECTIVES & INDICATORS	Coverage in <i>Student Edition (SE)</i> and <i>Teacher Edition (TE)</i> (pg #'s, etc.)	Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)	<i>Not covered in TE, SE or ancillaries</i> ✓
<b>b.</b> Classify substances based on their chemical and physical properties (e.g., reacts with water, does not react with water, flammable or nonflammable, hard or soft, flexible or nonflexible, evaporates or melts at room temperature).	<b>Student Edition:</b> (E) <i>MiniLab</i> 103 (F) 12, 14-18, 42-43, 47-48, 50-54 <i>Lab</i> 44, 56-57 <i>Launch Lab</i> 7 <i>MiniLab</i> 9, 18, 50 <i>National Geographic</i> 10 (G) <i>Lab</i> 49 (J) 114-119 (K) <i>Lab</i> 77 <i>Launch Lab</i> 71 <i>Mini Lab</i> 74 <b>Teacher Wraparound Edition:</b> (E) AS 103; LD 104 (F) A 18; AIL 26, 56; TFYI 10 (K) As 74; R 87		

OBJECTIVES & INDICATORS		Coverage in <i>Student Edition (SE)</i> and <i>Teacher Edition (TE)</i> (pg #'s, etc.)	Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)	<i>Not covered in TE, SE or ancillaries</i> ✓
c.	Investigate and report on the chemical and physical properties of a particular substance.	<b>Student Edition:</b> (E) 44-45 <i>MiniLab</i> 103 (F) 14-18, 19-25, 163-165 <i>Applying Science</i> 16 <i>Lab</i> 26-27 (H) 8-14, 101-102 <i>Launch Lab</i> 7 (I) 8-15 (K) <i>Communicating Your Data</i> 77 <i>Lab</i> 77 <b>Teacher Wraparound Edition:</b> (E) AS 103; LD 104; SJ 45; QD 45 (F) CC 15; DI 11, 17; IL 163; LD 16, 166; QD 17, 41; SCB 6E; SJ 24 (I) SCB 6E (K) As 77		

<b>OBJECTIVES &amp; INDICATORS</b>	<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>Objective 1.2:</b> Observe and evaluate evidence of chemical and physical change.			
<b>a.</b> Identify observable evidence of a physical change (e.g., change in shape, size, phase).	<b>Student Edition:</b> (E) 44-45 <i>Caption Question 45</i> (F) 37, 45, 50-54 (G) 37-38 <i>MiniLab 40</i> (H) 9 <i>Lab 9</i> <i>Science Online 9</i> (I) 19, 30 #61 <i>Launch Lab 35</i> (K) 78-79 <i>Figure 7 78</i> <i>Figure 9 79</i> <i>National Geographic 86</i> <i>Section 2 Review 87 #1</i> (L) 36 <i>Figure 1 36</i> <i>Lab 53</i> <b>Teacher Wraparound Edition:</b> (E) SJ 45; QD 45 (G) A 41; CC 38; CFU 41;		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>a.</b>	Continued from the cell above. Identify observable evidence of a physical change (e.g., change in shape, size, phase).	Continued from the cell above. (G) R 41; TFYI 37; VL 38 (H) IL 24 (K) A 86; CU 87; DI 81;MM 79; NG 86; QD 80; R 87		
<b>b.</b>	Identify observable evidence of a chemical change (e.g., color change, heat or light given off, change in odor, gas given off).	<b>Student Edition:</b> (E) 37 <i>MiniLab</i> 103 (F) 37, 46, 52-53, 67-68 (G) 39-41 <i>Design Your Own Lab</i> 54-55 <i>MiniLab</i> 40 <i>Science Online</i> 39 (J) 109, 115 (K) 80-84 <i>Figure 16</i> 84 <i>Integrate Life Science</i> 81 <i>Mini Lab</i> 81 <i>Section 2 Review</i> 87 #2 (L) 36 <i>Figure 1</i> 36		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>b.</b>	Continued from the cell above. Identify observable evidence of a chemical change (e.g., color change, heat or light given off, change in odor, gas given off).	Continued from the cell above. <b>Student Edition:</b> (L) <i>Lab 53</i> <i>National Geographic 37</i> <b>Teacher Wraparound Edition:</b> (E)    LD 104; QD 52 (F)    SCB 34E-F (G)    A 41; CFU 41; QD 41; R 41; UAA 39 (K)    A 86; As 81; CU 87; D 81; DI 81; IM 85; R 87		

OBJECTIVES & INDICATORS	Coverage in <i>Student Edition</i> (SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)	Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)	<i>Not covered in TE, SE or ancillaries</i> ✓
<p>c. Observe and describe chemical reactions involving atmospheric oxygen (e.g., rust, fire, respiration, photosynthesis).</p>	<p><b>Student Edition:</b>            (E) 20-21, 37, 49, 50  <i>Chapter Review</i> 58 #10  <i>Science Online</i> 49            (G) 40, 163            (H) 135            (I) 14-15, 102  <i>Integrate Life Science</i> 14            (L) <i>Figure 8</i> 44  <i>Table 1</i> 39  <b>Teacher Wraparound Edition:</b>            (E) QD 37, 52            (F) SCB 64E            (G) SCB 34E            (H) SCB 98E; TFYI 137            (I) A 102; MM 14            (L) D 44; VL 44</p>		



OBJECTIVES & INDICATORS		Coverage in <i>Student Edition</i> (SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)	Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)	<i>Not covered in TE, SE or ancillaries</i> ✓
d.	Investigate the effects of chemical change on physical properties of substances (e.g., cooking a raw egg, iron rusting, polymerization of a resin).	<b>Student Edition:</b> (E) 105 (F) 40-43, 45-48, 68 (G) 39-41 <i>Design Your Own Lab</i> 54-55 <i>Launch Lab</i> 35 <i>MiniLab</i> 40 <i>Science Online</i> 39 (H) <i>Lab</i> 50 (K) <i>Design Your Own Lab</i> 88-89 <i>Figure 13 &amp; 14</i> 82 <i>Figure 17</i> 85 <i>Integrate Life Science</i> 81 <i>Science Stats</i> 90 <i>Section 2 Review</i> 87 #2 <b>Teacher Wraparound Edition:</b> (E) QD 52 (F) ACT 68; LD 16; D 53; VL 68 (G) CC 40; QD 41; R 41 (I) LD 82 (K) DI 85; VL 82 (L) IM 34F; NG 37		

OBJECTIVES & INDICATORS		Coverage in <i>Student Edition</i> (SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)	Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)	<i>Not covered in TE, SE or ancillaries</i> ✓
<b>Objective 1.3:</b> Investigate and measure the effects of increasing or decreasing the amount of energy in a physical or chemical change, and relate the kind of energy added to the motion of the particles.				
<b>a.</b>	Identify the kinds of energy (e.g., heat, light, sound) given off or taken in when a substance undergoes a chemical or physical change.	<b>Student Edition:</b> (E) 20, 37, 38, 50-51, 96-100 <i>Integrate Earth Science</i> 51 <i>National Geographic</i> 101 (F) 73-75, 76-81 (H) <i>Integrate Chemistry</i> 138 <i>Lab</i> 15 (I) <i>Launch Lab</i> 35 <i>MiniLab</i> 19 (J) 109, 115-119 (K) 82 <i>Figure 14</i> 82 (L) 42-45 <b>Teacher Wraparound Edition:</b> (E) IC 21; QD 52; TFYI 52; VSE 101 (F) IL 79; LD 78; QD 77; SCB 64E; TFYI 127;VL 80 (H) A 15		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>a.</b>	Continued from the cell above. Identify the kinds of energy (e.g., heat, light, sound) given off or taken in when a substance undergoes a chemical or physical change.	Continued from the cell above. <b>Teacher Wraparound Edition:</b> (I) QD 72 (J) LD 116 (K) TFYI 82 (L) D 43; IM 42; SJ 44; TFYI 43		
<b>b.</b>	Relate the amount of energy added or taken away from a substance to the motion of molecules in the substance.	<b>Student Edition:</b> (E) 44-45 (F) 11, 40-42 <i>Integrate Chemistry</i> 43 (H) 9-10 (I) 18-19 (K) 46 <i>Integrate Physics</i> 46 (L) 48-49 (M) 162-165 <b>Teacher Wraparound Edition:</b> (E) QD 45; SJ 45 (H) A 15; TFYI 11; VL 9 (I) UAA 18 (K) IP 46 (M) IL 163		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>c.</b>	Measure and graph the relationship between the states of water and changes in its temperature.	<b>Student Edition:</b> (E) 44-45 (H) 9-10, 33 #15 <i>Lab 15</i> (I) <i>MiniLab</i> 38 (K) <i>Communicating Your Data</i> 53 <i>Lab 53</i> <b>Teacher Wraparound Edition:</b> (E) QD 45; SJ 45 (K) As 53; CYD 53		
<b>d.</b>	Cite evidence showing that heat may be given off or taken in during a chemical change (e.g., striking a match, mixing vinegar and antacid, mixing ammonium chloride and water).	<b>Student Edition:</b> (E) 20, 38, 50, 52-53 (F) 40-42, 46, 73-74, 79-81 (G) 40-41 <i>Design Your Own Lab</i> 54-55 (J) 109, 115-116 (K) 82 (L) 42-45 <i>Figure 1</i> 36 <b>Teacher Wraparound Edition:</b> (E) QD 52 (F) QD 77; VL 80 (K) IL 82 (L) SJ 42, 44; TFYI 43		

OBJECTIVES & INDICATORS		Coverage in <i>Student Edition</i> (SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)	Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)	<i>Not covered in TE, SE or ancillaries</i> ✓
e.	Plan and conduct an experiment, and report the effect of adding or removing energy on the chemical and physical changes.	<b>Student Edition:</b> (E) <i>Lab</i> 111 <i>Lab: Model and Invent</i> 116-117 (F)    111 <i>Lab</i> 13 <i>MiniLab</i> 111 (G) <i>Design Your Own Lab</i> 54-55, 82-83 (H) <i>Lab</i> 15 <i>MiniLab</i> 11 (I) <i>Design Your Own Lab</i> 26-27 <i>Lab</i> 85 <i>Launch Lab</i> 35 <i>MiniLab</i> 19 (J) <i>Lab</i> 60-61 (L) <i>Design Your Own Lab</i> 54-55 <b>Teacher Wraparound Edition:</b> (E)    AS 117; QD 52 (F)    IL 163 (G)    AIL 83 (H)    IL 24; LD 13 (I)    QD 72 (L)    AIL 54; As 55; CYD 55		

<b>OBJECTIVES &amp; INDICATORS</b>	<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>Objective 1.4:</b> Identify the observable features of chemical reactions.			
<b>a.</b> Identify the reactants and products in a given chemical change and describe the presence of the same atoms in both the reactants and products.	<b>Student Edition:</b> (E) 20, 37, 49, 50-51 <i>Chapter Review</i> 58 #10 <i>Integrate Chemistry</i> 21 <i>Science Online</i> 49 (I) 14, 97, 102 <i>MiniLab</i> 106 (J) 115-116 (L) 40-41 <i>Applying Math</i> 42 <i>Chapter 2 Review</i> 58 #16 <i>Section 1 Review</i> 45 #1 <b>Teacher Wraparound Edition:</b> (E) IC 21 (I) LD 82; MM 14 (L) A 41; CU 45; DI 41; SCB 34E		

OBJECTIVES & INDICATORS	Coverage in <i>Student Edition</i> (SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)	Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)	<i>Not covered in TE, SE or ancillaries</i> ✓
<b>b.</b> Cite examples of common significant chemical reactions (e.g., photosynthesis, respiration, combustion, rusting) in daily life.	<b>Student Edition:</b> (E) 20-21, 37, 38, 50, 52-53, 96, 98, 105 <i>Integrate Chemistry</i> 21 (F) 11, 41, 73-75, 79-81 <i>Integrate Physics</i> 11 (G) 39-41, 163 <i>Science Online</i> 39 (H) 85-89, 135 (I) 14-15 (J) 96-102, 109, 115-116 (L) <i>Figure 8</i> 44 <i>Figure 19</i> 51 <i>Integrate Health</i> 49 <i>Integrate Life Science</i> 39 <i>Table 1</i> 39 (M) <i>National Geographic</i> 171 (N) <i>Integrate Chemistry</i> 17 <b>Teacher Wraparound Edition:</b> (E) IC 21; QD 37, 52; TFYI 106 (F) SCB 34E-F (G) A 41; CC 40; R 41; SCB 34E (H) IM 136; TFYI 137 (L) As 52; D 44; DI 39; ILS 39; R 52		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>c.</b>	Demonstrate that mass is conserved in a chemical reaction (e.g., mix two solutions that result in a color change or formation of a precipitate and weigh the solutions before and after mixing).	<b>Student Edition:</b> (E) 51 <i>Lab 54-55</i> (F) 39 <i>Section Review 39</i> (L) <i>Mini Lab 40</i> <b>Teacher Wraparound Edition:</b> (E) DIF 51 (L) DI 41		
<b>d.</b>	Experiment with variables affecting the relative rates of chemical changes (e.g., heating, cooling, stirring, crushing, concentration).	<b>Student Edition:</b> (F) <i>Lab 12</i> (G) <i>Design Your Own Lab 54-55</i> <i>MiniLab 40</i> (L) <i>Mini Lab 74</i> <b>Teacher Wraparound Edition:</b> (G) UAA 39 (L) A 48; IL 49; LD 51; QD 49		



OBJECTIVES & INDICATORS	Coverage in <i>Student Edition</i> (SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)	Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)	<i>Not covered in TE, SE or ancillaries</i> ✓
<p>e. Research and report on how scientists or engineers have applied principles of chemistry to an application encountered in daily life (e.g., heat-resistant plastic handles on pans, rust-resistant paints on highway bridges).</p>	<p><b>Student Edition:</b></p> <p>(E) 99-100 <i>National Geographic</i> 101 <i>Time: Science and Society</i> 86</p> <p>(F) 73-75, 79-81 <i>Science and History</i> 28</p> <p>(H) 102-103 <i>Integrate Life Science</i> 10</p> <p>(J) 8-13, 29</p> <p>(K) <i>National Geographic</i> 86</p> <p>(L) 51, 69 <i>Figure 6</i> 69 <i>Figure 19</i> 51 <i>Mini Lab</i> 50 <i>Time Science and Society</i> 118</p> <p>(N) <i>Figure 6</i> 70 <i>Integrate Chemistry</i> 17, 70</p> <p><b>Teacher Wraparound Edition:</b></p> <p>(E) VSE 101</p> <p>(F) CC 15; DI 21; SJ 24</p> <p>(J) SCB 6F</p> <p>(K) A 86</p> <p>(L) As 50; DI 69, 80</p> <p>(N) IC 17</p>		

<b>STANDARD II: Students will understand that energy from sunlight is changed to chemical energy in plants, transfers between living organisms, and that changing the environment may alter the amount of energy provided to living organisms.</b>			
<b>Percentage of coverage in the <i>student and teacher edition</i> for Standard II: _____ %</b>		<b>Percentage of coverage not in student or teacher edition, but covered in the <i>ancillary material</i> for Standard III: _____ %</b>	
<b>OBJECTIVES &amp; INDICATORS</b>	<b>Coverage in <i>Student Edition (SE)</i> and <i>Teacher Edition (TE)</i> (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>Objective 2.1:</b> Compare ways that plants and animals obtain and use energy.			
<b>a.</b> Recognize the importance of photosynthesis in using light energy as part of the chemical process that builds plant materials.	<b>Student Edition:</b> (E) 20, 37, 38, 49, 50 <i>Science Online</i> 49 (G) 163 (H) 135 <i>Section Review</i> 142 (M) 140 <b>Teacher Wraparound Edition:</b> (H) TFYI 137 (L) D 44 (M) SCB 124E; SJ 129		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>b.</b>	Explain how respiration in animals is a process that converts food energy into mechanical and heat energy.	<b>Student Edition:</b> (E) 21, 37, 38, 49, 51 <i>Science Online</i> 49 (M) 129 <b>Teacher Wraparound Edition:</b> (H) IM 136 (M) DI 129		
<b>c.</b>	Trace the path of energy from the sun to mechanical energy in an organism (e.g., sunlight - light energy to plants by photosynthesis to sugars - stored chemical energy to respiration in muscle cell - usable chemical energy to muscle contraction-mechanical energy).	<b>Student Edition:</b> (E) 20-21, 37, 38, 49, 50, 51-53 (H) 46, 135-137 (M) 131 <i>Blowing Off Steam</i> 124 <i>Figure 8</i> 131 <b>Teacher Wraparound Edition:</b> (H) TFYI 137 (M) AP 124; TPK 131		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>Objective 2.2:</b> Generalize the dependent relationships between organisms.				
<b>a.</b>	Categorize the relationships between organisms (i.e., producer/consumer/decomposer, predator/prey, mutualism/parasitism) and provide examples of each.	<b>Student Edition:</b> (E) 20-21, 22, 24, 51 <i>Chapter Review</i> 31 #27, #32 <i>Section Review</i> 24 #2 (H) DI 140; TFYI 146 (I) DI 76 An example of plants being beneficial to humans. (L) (L) <i>Time Science and Society</i> 118 (M) <i>Integrate Life Science</i> 133 <b>Teacher Wraparound Edition:</b> (E) AS 24; DIF 51; UAA 22 (L) CB 118		
<b>b.</b>	Use models to trace the flow of energy in food chains and food webs.	<b>Student Edition:</b> (E) 21, 51-52 <i>Chapter Review</i> 31 #25, 31 #30 (H) 135-136 <i>Applying Skills</i> 142 <b>Teacher Wraparound Edition:</b> (E) AC 51; DI 51; DIF 51; MAM 22; VL 23 (H) MM 136; VL 136		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>c.</b>	Formulate and test a hypothesis on the effects of air, temperature, water, or light on plants (e.g., seed germination, growth rates, seasonal adaptations).	<b>Student Edition:</b> (E) <i>Launch Lab</i> 63 <i>MiniLab</i> 135 <i>Section Review</i> 49 #5 (I)    121 #29 <b>Teacher Wraparound Edition:</b> (H)    IL 83		
<b>d.</b>	Research multiple ways that different scientists have investigated the same ecosystem.	Scientists can study the same ecosystem from a variety of different perspectives: population biology, biodiversity measures, food web analysis, ecosystem vs. community level, etc. (E) <b>Student Edition:</b> (E)    9-11, 13-14, 20-24, 51-53, 126 <i>Applying Math</i> 129 (G) <i>The Nature of Science</i> 4-5 (L) <i>Investigate</i> 118 <i>Time Science and Society</i> 118 <b>Teacher Wraparound Edition:</b> (E)    DIF 22; IL 14; LD 14; RT 11 (L)    CB 118; I 118		

<b>OBJECTIVES &amp; INDICATORS</b>	<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>Objective 2.3:</b> Analyze human influence on the capacity of an environment to sustain living things.			
<b>a.</b> Describe specific examples of how humans have changed the capacity of an environment to support specific life forms (e.g., people create wetlands and nesting boxes that increase the number and range of wood ducks, acid rain damages amphibian eggs and reduces population of frogs, clear cutting forests affects squirrel populations, suburban sprawl reduces mule deer winter range thus decreasing numbers of deer).	<b>Student Edition:</b> (E) 96, 97, 103, 107-109,130-131, 133-136, 138 <i>Lab</i> 137 <i>Launch Lab</i> 125 <i>MiniLab</i> 133 <i>National Geographic</i> 133 <i>Section Review</i> 136 #4 (G) 50-53 <i>Integrate History</i> 77 <i>The Nature of Science</i> 2-5 (H) 54-57, 76-84, 143-147 (I) 96-102, 107-110 <i>Applying Skills</i> 110 (K) <i>Applying Science</i> 49 (L) <i>National Geographic</i> 80 (M) 141, 167 <i>Integrate Life Science</i> 167 <i>Time Science and Society</i> 176		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>a.</b>	Continued from the cell above. Describe specific examples of how humans have changed the capacity of an environment to support specific life forms (e.g., people create wetlands and nesting boxes that increase the number and range of wood ducks, acid rain damages amphibian eggs and reduces population of frogs, clear cutting forests affects squirrel populations, suburban sprawl reduces mule deer winter range thus decreasing numbers of deer).	Continued from the cell above. <b>Teacher Wraparound Edition:</b> (E) AC 107; DI 97; TFYI 132; VTES 132 (H) A 43; DI 83; SCB 34F (I) A 15; CFU 110; IL 108; QD 107; R 110; TFYI 109 (L) A 80; AP 94; CC 4; NG 80 (M) CB 176		
<b>b.</b>	Distinguish between inference and evidence in a newspaper or magazine article relating to the effect of humans on the environment.	<b>Teacher Wraparound Edition:</b> (E) CC 106; IH 136; SJ 131 (G) <i>You Do It</i> 5 (O) A 15		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>c.</b>	Infer the potential effects of humans on a specific food web.	<b>Student Edition:</b> (E) 51-52 <i>Lab 76</i> (G) <i>Integrate Careers</i> 51 (H) 143-147 (I) 107-110, 123 #11-12 (M) <i>Integrate Life Science</i> 167 <b>Teacher Wraparound Edition:</b> (E) SJ 130; VL 52 (H) CFU 147; DIS 146; QD 144; SCB 34F (I) A 110; DI 107; IL 108; QD 107; VL 107, 109 (L) ILS 82		
<b>d.</b>	Evaluate and present arguments for and against allowing a specific species of plant or animal to become extinct, and relate the argument to the of flow energy in an ecosystem.	<b>Student Edition:</b> (E) 128-131 (I) 115 (M) 140 <i>Figure 17</i> 140 <b>Teacher Wraparound Edition:</b> (E) DI 130; SJ 130; UAA 130 (H) TS 149		



STANDARD III: Students will understand the processes of rock and fossil formation.				
Percentage of coverage in the <i>student and teacher edition</i> for Standard III: _____ %		Percentage of coverage not in student or teacher edition, but covered in the <i>ancillary material</i> for Standard IV: _____ %		
OBJECTIVES & INDICATORS		Coverage in <i>Student Edition</i> (SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)	Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)	<i>Not covered in TE, SE or ancillaries</i> ✓
Objective 3.1: Compare rocks and minerals and describe how they are related.				
a.	Recognize that most rocks are composed of minerals.	Student Edition: (E) 95 (F) 36, 63 #10 <i>Launch Lab 7, 35</i> (K) <i>Integrate Earth Science 29</i> <i>Launch Lab 71</i> (L) <i>Figure 4 67</i> <i>Integrate Environment 67</i> Teacher Wraparound Edition: (F) A 7; R 39; SCB 34E-F		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>b.</b>	Observe and describe the minerals found in rocks (e.g., shape, color, luster, texture, hardness).	<b>Student Edition:</b> (F) 8-12, 14-18, 20-21 <i>Applying Science</i> 16 <i>Lab</i> 26-27 <i>MiniLab</i> 18 (K) <i>Launch Lab</i> 71 <b>Teacher Wraparound Edition:</b> (F) A 18, 27; AIL 16; LD 16; QD 17; R 18; SCB 6E; UAA 17 (K) A 71		
<b>c.</b>	Categorize rock samples as sedimentary, metamorphic, or igneous.	<b>Student Edition:</b> (F) 40-43, 45-48, 49-55 <i>Lab</i> 44, 56-57 <i>Science Online</i> 42, 46 (K) <i>Launch Lab</i> 71 <b>Teacher Wraparound Edition:</b> (F) A 48, 57; AIL 56; DI 37, 41, 42; R 43, 55; SCB 34E-F		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>Objective 3.2:</b> Describe the nature of the changes that rocks undergo over long periods of time.				
<b>a.</b>	Diagram and explain the rock cycle.	<b>Student Edition:</b> (F) 36-39, 40-42, 45-48, 49-55 <i>Get Ready to Read</i> 36A-B <i>MiniLab</i> 37 <i>National Geographic</i> 38 <b>Teacher Wraparound Edition:</b> (F) A 55; CFU 39; SCB 34E-F; SJ 51; TBI 34		
<b>b.</b>	Describe the role of energy in the processes that change rock materials over time.	<b>Student Edition:</b> (F) 37, 40-43, 45-46, 50-51 <i>National Geographic</i> 38 (G) 36-41 <i>Design Your Own Lab</i> 54-55 <i>MiniLab</i> 40 (M) 140 <i>Integrate Earth Science</i> 140 <b>Teacher Wraparound Edition:</b> (F) DIS 46; SCB 34E-F; SJ 51; UAA 46; V 38; VL 46 (G) DIS 38; IM 34F		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>c.</b>	Use a model to demonstrate how erosion changes the surface of Earth.	<b>Student Edition:</b> (E) 109 <i>Integrate Earth Science</i> 74 <i>Launch Lab</i> 93 <i>MiniLab</i> 96 (G) 50-53, 64-68, 69-74, 76-81, 92-102, 107-108, 109-112 <i>Design Your Own Lab</i> 82-83 <i>Lab</i> 75 <i>Launch Lab</i> 91 <i>MiniLab</i> 65 <b>Teacher Wraparound Edition:</b> (E) IES 74; TFYI 109 (G) A 65, 68; ACT 95; IL 66; IM 62F; SCB 62E, 90E-F		
<b>d.</b>	Relate gravity to changes in Earth's surface.	<b>Student Edition:</b> (G) 64-68, 93 <i>Integrate Physics</i> 67 <i>Section Review</i> 68 (H) 71-73 (M) 43-44 <b>Teacher Wraparound Edition:</b> (G) SCB 62E; TFYI 65		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>e.</b>	Identify the role of weathering of rocks in soil formation.	<b>Student Edition:</b> (E) 38 (G) 41, 42-48 <i>MiniLab</i> 44 <b>Teacher Wraparound Edition:</b> (G) ACT 43; CFU 48; DIS 45; FF 43; IM 47; V 43		
<b>f.</b>	Describe and model the processes of fossil formation.	<b>Student Edition:</b> (G) 124-131 <i>Applying Skills</i> 131 <i>Get Ready to Read</i> 124A-B <i>Launch Lab</i> 121 <i>MiniLab</i> 125 <i>Model and Invent Lab</i> 144-145 (M) 140 <b>Teacher Wraparound Edition:</b> (G) A 123, 125; AR 126; CC 127; DI 125; IM 126; LD 163; MM 129, 157; QD 128; R 131; TFYI 126; UAA 127; VL 127		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>Objective 3.3:</b> Describe how rock and fossil evidence is used to infer Earth's history.				
<b>a.</b>	Describe how the deposition of rock materials produces layering of sedimentary rocks over time.	<b>Student Edition:</b> (F) 49-55, 61 <i>Applying Math</i> 54 (G) 64-65, 70-71, 79-81, 101-102 (M) <i>Figure 17</i> 140 <b>Teacher Wraparound Edition:</b> (F) DIS 51 (G) CC 71; LD 70		
<b>b.</b>	Identify the assumptions scientists make to determine relative ages of rock layers.	<b>Student Edition:</b> (G) 132-137 <i>Get Ready to Read</i> 124A-B <i>Lab</i> 138 <b>Teacher Wraparound Edition:</b> (G) A 137, 138; CFU 131, 137; IL 132; IM 122F; R 137; SCB 122E; TBI 122; TFYI 136; TPK 132		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>c.</b>	Explain why some sedimentary rock layers may not always appear with youngest rock on top and older rocks below (i.e., folding, faulting).	<b>Student Edition:</b> (G) 134, 149 #23, 151 #21 <i>Lab</i> 138 <i>National Geographic</i> 135 <b>Teacher Wraparound Edition:</b> (G) ACT 135; DI 134; DIS 134; FF 133; R 137; V 135; VL 134		
<b>d.</b>	Research how fossils show evidence of the changing surface of the Earth.	<b>Student Edition:</b> (E) 130 (F) 99-100 <i>MiniLab</i> 100 (G) 124-131, 149 #25, 151 #28 <i>Get Ready to Read</i> 124A-B <i>Section Review</i> 131 <i>Science Online</i> 136 (M) 140 <b>Teacher Wraparound Edition:</b> (F) TFYI 100 (G) ACT 129; DI 130, 133; DIS 159; IL 136; SCB 122E; VL130		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>e.</b>	Propose why more recently deposited rock layers are more likely to contain fossils resembling existing species than older rock layers.	<b>Student Edition:</b> (G) 149 #18, 154-155, 162 <i>Applying Skills</i> 137 <b>Teacher Wraparound Edition:</b> (G) IM 156; TBI 122		
<b>Objective 3.4:</b> Compare rapid and gradual changes to Earth's surface.				
<b>a.</b>	Describe how energy from the Earth's interior causes changes to Earth's surface (i.e., earthquakes, volcanoes).	<b>Student Edition:</b> (E) 64 (F) 106-111, 121 #22, 123 #20, 126-127, 158-161 <i>MiniLab</i> 111 <i>National Geographic</i> 109 <i>Science Online</i> 108 <i>Section Review</i> 115 (M) 139 (O) <i>Integrate Earth Science</i> 14 <b>Teacher Wraparound Edition:</b> (E) AS 67 (F) A 111, 117; CC 113; LD 108; R 115; SCB 124E; TBI 96, 124 (O) CC 28		



<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>b.</b>	Describe how earthquakes and volcanoes transfer energy from Earth's interior to the surface (e.g., seismic waves transfer mechanical energy, flowing magma transfers heat and mechanical energy).	<b>Student Edition:</b> (E) 64 (F) 106-111, 126-129, 130-137, 158-161, 162-169 <i>Get Ready to Read</i> 126A-B <i>Launch Lab</i> 125 <i>MiniLab</i> 160 <i>Use the Internet Lab</i> 116-117 (O) <i>Design Your Own Lab</i> 26-27 <i>Integrate Earth Science</i> 14 <b>Teacher Wraparound Edition:</b> (F) ACT 164; AIL 166; DI 128; IL 163; QD 159; TBI 124 (O) CC 28; IL 14; TFYI 10		
<b>c.</b>	Model the process of energy buildup and release in earthquakes.	<b>Student Edition:</b> (F) 126-129, 130-137 <i>Applying Math</i> 143 <i>Applying Skills</i> 129 <i>Get Ready to Read</i> 126A-B <i>Launch Lab</i> 125 <i>National Geographic</i> 132 (O) <i>Design Your Own Lab</i> 26-27 <b>Teacher Wraparound Edition:</b> (F) ACT 127, 128; TFYI 131		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries ✓</i></b>
<b>d.</b>	Investigate and report possible reasons why the best engineering or ecological practices are not always followed in making decisions about building roads, dams, and other structures.	<b>Student Edition:</b> (E) 97, 98 (F) 78 (G) 67-68 <i>Science and Society</i> 116 <i>The Nature of Science</i> 2-5 <i>You Do It</i> 5 (M) <i>Time Science and Society</i> 176 <b>Teacher Wraparound Edition:</b> (E) DI 97; TFYI 98 (F) DIS 74, 157; VL 78 (G) CC 4; DIS 3; EX 4; SJ 2 (M) D 176		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries ✓</i></b>
e.	Model how small changes over time add up to major changes to Earth's surface.	<b>Student Edition:</b> (E) 109-110 <i>Launch Lab</i> 93 <i>MiniLab</i> 96 (F) 98-101, 114-115 <i>Lab</i> 105 <i>National Geographic</i> 109 (G) 69-74, 96-102, 107-108, 109-112 (L) <i>Integrate Environment</i> 67 <b>Teacher Wraparound Edition:</b> (E) QD 109; TFYI 109 (F) ACT 109; LD 108; TFYI 114; V 109 (G) CC 73; R 74		

<b>STANDARD IV: Students will understand the relationships among energy, force, and motion.</b>			
Percentage of coverage in the <i>student and teacher edition</i> for Standard IV: _____ %		Percentage of coverage not in student or teacher edition, but covered in the <i>ancillary material</i> for Standard VI: _____ %	
<b>OBJECTIVES &amp; INDICATORS</b>		Coverage in <i>Student Edition (SE) and Teacher Edition (TE)</i> (pg #'s, etc.)	Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)
<b>Objective 4.1:</b> Investigate the transfer of energy through various materials.			<i>Not covered in TE, SE or ancillaries ✓</i>
<b>a.</b>	Relate the energy of a wave to wavelength.	<b>Student Edition:</b> (F) 130-137 (H) 110-113 <i>Lab 117</i> <i>National Geographic 112</i> (J) 8-9 <i>Applying Math 13</i> (O) 8, 13-14 <i>Figure 8 14</i>  <b>Teacher Wraparound Edition:</b> (F) TPK 130 (H) SCB 98F (J) IL 9 (O) VL 14	

OBJECTIVES & INDICATORS	Coverage in <i>Student Edition</i> (SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)	Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)	<i>Not covered in TE, SE or ancillaries</i> ✓
<b>b.</b> Compare the transfer of energy (i.e., sound, light, earthquake waves, heat) through various mediums.	<b>Student Edition:</b> (F) 130-137 <i>Integrate Physics</i> 131 (H) 110-113 <i>Lab</i> 117 <i>National Geographic</i> 112 (J) 8-9 <i>Get Ready to Read</i> 8B (M) 126 <i>Integrate Life Science</i> 135 (O) 9-12 <b>Teacher Wraparound Edition:</b> (F) DI 131; LD 134; QD 136 (H) R 116; UAA 113; V 112 (M) BI 124 (O) AIL 26; D 9; DI 9; QD 10; SCB 6E; TFYI 10; TPK 8		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
c.	Describe the spread of energy away from an energy-producing source.	<b>Student Edition:</b> (F) 130-137, 142 <i>Lab</i> 138, 146-147 <i>National Geographic</i> 132 (H) 110-113 <i>Lab</i> 117 <i>MiniLab</i> 111 (J) 8-9 (O) 8-9, 13 <i>Figure 1</i> 8 <i>Launch Lab</i> 7 <b>Teacher Wraparound Edition:</b> (F) CFU 137; DI 132; QD 142; USW 131 (H) A 111; ACT 112 (O) BI 6; CD 20; SCB 6E		

<b>OBJECTIVES &amp; INDICATORS</b>	<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
d.	Compare the transfer of heat by conduction, convection, and radiation and provide examples of each.		
	<b>Student Edition:</b> (E) 39, 41, 99 <i>Lab</i> 111 <i>Lab: Model and Invent</i> 116-117 (F) 111, 123 #20 <i>MiniLab</i> 111 <i>Section Review</i> 115 (I) 17-19, 21, 25, 31 #21, 33 #23 <i>Applying Math</i> 20 <i>MiniLab</i> 19 (J) 8-9 (M) 163-165 <i>Figure 7</i> 164 <i>Mini Lab</i> 165 <i>Section 2 Review</i> 167 #4, #6 <b>Teacher Wraparound Edition:</b> (E) AS 117; DIF 39 (F) A 111; R 115 (I) CFU 20; DI 18; DIS 18; UAA 18; USW 18 (J) TPK 8 (M) AR 164; D 164; DI 165		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
e.	Demonstrate how white light can be separated into the visible color spectrum.	<b>Student Edition:</b> (O) 21 <i>Figure 4 98</i> <i>Lab 80</i> <b>Teacher Wraparound Edition:</b> (O) A 98; As 80; QD 21; VL 21		
<b>Objective 4.2:</b> Examine the force exerted on objects by gravity.				
a.	Distinguish between mass and weight.	<b>Student Edition:</b> (E) <i>Science Skill Handbook</i> 160 (F) <i>Science Skill Handbook</i> 192 (G) <i>Science Skill Handbook</i> 192 (H) <i>Science Skill Handbook</i> 164 (I) <i>MiniLab</i> 13 <i>Science Skill Handbook</i> 132 (J) <i>Science Skill Handbook</i> 142 (M) 44 <b>Teacher Wraparound Edition:</b> (G) SCB 90E (M) DI 43		



<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>b.</b>	Cite examples of how Earth's gravitational force on an object depends upon the mass of the object.	<b>Student Edition:</b> (J) <i>MiniLab</i> 79 (M)     43-44, 52 <b>Teacher Wraparound Edition:</b> (G)     SCB 90E (J)     A 79; TS 79 (M)     A 45		
<b>c.</b>	Describe how Earth's gravitational force on an object depends upon the distance of the object from Earth.	<b>Student Edition:</b> (M)     47 <i>Integrate History</i> 43 <b>Teacher Wraparound Edition:</b> (M)     D 46		
<b>d.</b>	Design and build structures to support a load.	<b>Student Edition:</b> (F) <i>MiniLab</i> 144 (K) <i>Design Your Own Lab</i> 62-63 <b>Teacher Wraparound Edition:</b> (E)     AS 93 (F)     A 144; IL 47; R 145		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>e.</b>	Engineer (design and build) a machine that uses gravity to accomplish a task.	<b>Student Edition:</b> (E) 97 (F) MM 78 (J) ACT 19 <b>Teacher Wraparound Edition:</b> (E) DIF 97 (M) A 45; IL 110; MM 112		
<b>Objective 4.3:</b> Investigate the application of forces that act on objects, and the resulting motion.				
<b>a.</b>	Calculate the mechanical advantage created by a lever.	<b>Student Edition:</b> (M) 105 <i>Applying Math</i> 105 <i>Figure 13</i> 112 <b>Teacher Wraparound Edition:</b> (M) A 105		
<b>b.</b>	Engineer a device that uses levers or inclined planes to create a mechanical advantage.	<b>Student Edition:</b> (M) <i>Lab</i> 103 <b>Teacher Wraparound Edition:</b> (M) IL 110; MM 112		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>c.</b>	Engineer a device that uses friction to control the motion of an object.	<b>Student Edition:</b> (M) 196 <b>Teacher Wraparound Edition:</b> (M) FT 196		
<b>d.</b>	Design and build a complex machine capable of doing a specified task.	Making a display of a complex machine is discussed in the following references (M). <b>Student Edition:</b> (F) MM 78 (H) DI 102; IL 101; MM 20 (J) A 14; ACT 19; IL 80 (M) <i>Chapter 4 Review</i> 121 #27 <b>Teacher Wraparound Edition:</b> (M) IL 110 Identifying complex machines: (M) R 115		

OBJECTIVES & INDICATORS		Coverage in <i>Student Edition</i> (SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)	Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)	<i>Not covered in TE, SE or ancillaries</i> ✓
e.	Investigate the principles used to engineer changes in forces and motion.	<b>Student Edition:</b> (F) 95 #21 (G) <i>Extra Try at Home Labs</i> 199 (H) 42-43 <i>Science Online</i> 42, 45 (J) 15-17, 23 <i>MiniLab</i> 21 (M) 37-41, 43-48, 49-50, 52, 76, 80, 104-108 <i>Figure 6</i> 106 <i>Figure 7</i> 108 <i>Lab</i> 55 <i>Mini Lab</i> 40 <i>Time Science and Society</i> 58 (N) <i>Figure 5</i> 11 <i>Mini Lab</i> 16 <b>Teacher Wraparound Edition:</b> (G) DI 79; LD 100 (H) MM 20 (I) A 21; CD 16; DIS 16; LD 26; QD 16 (M) As 40, 55, 108; D 39; DI 40; R 41; VL 106		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>Objective 4.4:</b> Analyze various forms of energy and how living organisms sense and respond to energy.				
<b>a.</b>	Analyze the cyclic nature of potential and kinetic energy (e.g., a bouncing ball, a pendulum).	<b>Student Edition:</b> (G) <i>Integrate Physics</i> 67 (M) 132 <i>Figure 8</i> 131 <i>Figure 9</i> 132 <i>Mini Lab</i> 133 <i>Section 2 Review</i> 137 #1 <b>Teacher Wraparound Edition:</b> (M) As 133; BI 124; IM 124F,135; LD 132		
<b>b.</b>	Trace the conversion of energy from one form of energy to another (e.g., light to chemical to mechanical).	<b>Student Edition:</b> (E) 20-21, 38, 50-53, 96-100 <i>Lab</i> 111 <i>Lab: Model and Invent</i> 116-117 (F) 66-75, 76-81, 95 #21, 130-131 <i>National Geographic</i> 132 (G) <i>Integrate Physics</i> 67 (H) 135-137 <i>Integrate Life Science</i> 47		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>b.</b>	Continued from the cell above. Trace the conversion of energy from one form of energy to another (e.g., light to chemical to mechanical).	Continued from the cell above. <b>Student Edition:</b> (M) 128-129, 133, 135-137 <i>Figure 10</i> 133 <i>Figure 12</i> 135 <i>Figure 14</i> 136 <i>Integrate Life Science</i> 133 <i>National Geographic</i> 134 <i>Section 2 Review</i> 137 #3 <b>Teacher Wraparound Edition:</b> (E) AS 117; QD 52; TFYI 52; VL 97 (F) IL 79; MM 78 (I) IM 6F; SCB 6E (M) As 137, 138; D 135, 136; NG 134; QD 133; VL 133		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
<b>c.</b>	Cite examples of how organisms sense various types of energy.	<b>Student Edition:</b> (F) <i>Science Stats</i> 148 (M) 128-129 <i>Figure 12</i> 135 <i>Lab</i> 138 (O) <i>Integrate Life Science</i> 41 <b>Teacher Wraparound Edition:</b> (F) RE 141 (H) DIS 92 (M) CU 137; DI 135		
<b>d.</b>	Investigate and report the response of various organisms to changes in energy (e.g., plant response to light, human response to motion, sound, light, insect's response to changes in light intensity).	<b>Student Edition:</b> (H) <i>Integrate Career</i> 138 <i>Integrate Life Science</i> 115 (I) <i>Integrate Life Science</i> 37 (M) <i>Figure 12</i> 135 <i>Integrate Life Science</i> 107, 133, (O) 36, 54-55 <i>Figure 22</i> 54 <i>Integrate Life Science</i> 41 <i>Mini Lab</i> 97 <b>Teacher Wraparound Edition:</b> (F) IL 134; MM 140 (I) DIS 73; SJ 40 (O) As 97; D 37; TFYI 41; VL 54		

<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries</i> ✓</b>
e.	Investigate and describe how engineers have developed devices to help us sense various types of energy (e.g., seismographs, eyeglasses, telescopes, hearing aids).	<b>Student Edition:</b> (F) 133-137 <i>Lab</i> 138 <i>MiniLab</i> 135 <i>Science Online</i> 133 (H) <i>Integrate Career</i> 108 <i>The Nature of Science</i> 2-5 <i>You Do It</i> 5 (I) <i>The Nature of Science</i> 2-5 <i>You Do It</i> 5 (J) 8-13, 108, 122-123 <i>Integrate Career</i> 51 <i>Lab</i> 14, 113 (M) 135 <i>Time Science and Society</i> 118 (O) 41, 45, 72-73, 83, 114-116 <i>Applying Science</i> 42 <i>Design Your Own Lab</i> 26-27 <i>Integrate History</i> 115 <i>Oops! Accidents in Science</i> 120		



<b>OBJECTIVES &amp; INDICATORS</b>		<b>Coverage in <i>Student Edition</i>(SE) and <i>Teacher Edition</i> (TE) (pg #'s, etc.)</b>	<b>Coverage in <i>Ancillary Material</i> (titles, pg #'s, etc.)</b>	<b><i>Not covered in TE, SE or ancillaries ✓</i></b>
e.	Continued from the cell above. Investigate and describe how engineers have developed devices to help us sense various types of energy (e.g., seismographs, eyeglasses, telescopes, hearing aids).	Continued from the cell above. <b>Teacher Wraparound Edition:</b> (F) IL 134 (H) ACT 4 (J) DI 9; SCB 6E; SJ 11 (M) CB 118 (O) CB 120; CC 83; D 115, 120; DI 74; MM 115		